

Appl. No. 10/027,558
Listing of Claims and Remarks dated Feb. 23, 2006
Accompanying Comments of Feb. 23, 2006

Listing of the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Previously Presented) A method for operating a wireless-enabled device, the method comprising:

- computing a DC compensation factor for a known pilot signal;
- receiving a first plurality of bits of an incoming pilot signal;
- computing a DC average for the received first plurality of bits of the incoming pilot signal;

- computing a compensated DC average for the first plurality of bits of the incoming pilot signal using the DC compensation factor and the DC average;

- adjusting at least an indication of the received first plurality of bits according to the computed compensated DC average;

- comparing the adjusted at least an indication of the received first plurality of bits with corresponding bits of the known pilot signal; and

- responsive to a threshold number of bits of the adjusted at least an indication of first plurality of bits matching the corresponding bits of the known pilot signal, outputting the compensated DC average for the first plurality of bits.

2. (Original) The method of claim 1, further comprising:

- receiving a second plurality of bits of the incoming pilot signal; and

- locating a symbol peak in the second plurality of bits;

- wherein the symbol peak is usable to determine a symbol timing of the incoming pilot signal.

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3. (Previously Presented) The method of claim 2, further comprising:
receiving a third plurality of bits of the incoming pilot signal;
adjusting at least an indication of the received third plurality of bits according to the computed compensated DC average;
comparing the adjusted at least an indication of the received third plurality of bits with corresponding bits of the known pilot signal; and
responsive to the threshold number of bits of the adjusted at least an indication of the received first plurality of bits matching the corresponding bits of the known pilot signal and responsive to a threshold number of bits of the adjusted at least an indication of third plurality of bits matching the corresponding bits of the known pilot signal, providing the compensated DC average for the first plurality of bits to a DC tracker.

4. (Original) The method of claim 1, further comprising:
outputting the compensated DC average for the first plurality of bits to a DC tracker.

5. (Original) The method of claim 1, wherein the pilot signal comprises:
a frame sync pattern.

Claims 6-13 (Cancelled).

14. (Previously Presented) A system for operating a wireless-enabled device, the system comprising:
means for computing a DC compensation factor for a known pilot signal;
means for receiving a first plurality of bits of an incoming pilot signal;
means for computing a DC average for the received first plurality of bits of the incoming pilot signal;
means for computing a compensated DC average for the first plurality of bits of the incoming pilot signal using the DC compensation factor and the DC average;

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means for adjusting at least an indication of the received first plurality of bits according to the computed compensated DC average;

means for comparing the adjusted at least an indication of the received first plurality of bits with corresponding bits of the known pilot signal; and

responsive to a threshold number of bits of the adjusted at least an indication of the received first plurality of bits matching the corresponding bits of the known pilot signal, means for outputting the compensated DC average for the first plurality of bits.

15. (Previously Presented) The system of claim 14, further comprising:

means for receiving a second plurality of bits of the incoming pilot signal; and means for locating a symbol peak in the second plurality of bits;

wherein the symbol peak is usable to determine a symbol timing of the incoming pilot signal.

16. (Previously Presented) The system of claim 15, further comprising:

means for receiving a third plurality of bits of the incoming pilot signal;

means for adjusting at least an indication of the received third plurality of bits according to the computed compensated DC average;

means for comparing the adjusted at least an indication of the received third plurality of bits with corresponding bits of the known pilot signal;

responsive to the threshold number of bits of the adjusted at least an indication of the received first plurality of bits matching the corresponding bits of the known pilot signal and responsive to a threshold number of bits of the adjusted at least an indication of the received third plurality of bits matching the corresponding bits of the known pilot signal, means for providing the compensated DC average for the first plurality of bits to a DC tracker.

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17. (Original) A method for operating a wireless-enabled device, comprising:
receiving a synchronization word;
computing a DC average for a first portion of the received synchronization word;
computing a DC compensation factor using a known synchronization word;
computing a compensated DC average using the DC average and the DC compensation factor;
determining whether a threshold number of bits of the first portion of the received synchronization word as adjusted by the DC compensation factor match corresponding bits in the known synchronization word; and
responsive to a threshold number of bits of the first portion of the received synchronization word as adjusted by the DC compensation factor matching the corresponding bits in the known synchronization word, providing the compensated DC average to an offset tracking device.

18. (Previously Presented) The method of claim 17, wherein the DC average for the first portion of the received synchronization word is a first DC average and wherein the compensated DC average is a first compensated DC average, the method further comprising:

responsive to a threshold number of bits of the received synchronization word as adjusted by the DC compensation factor not matching the corresponding bits in the known synchronization word, computing a second DC average for a second portion of the received synchronization word;

computing a second compensated DC average using the second DC average for the second portion of the received synchronization word and the DC compensation factor;

determining whether a threshold number of bits of the second portion of the received synchronization word as adjusted by the DC compensation factor match corresponding bits in the known synchronization word; and

responsive to a threshold number of bits of the second portion of the received synchronization word as adjusted by the DC compensation factor matching the corresponding bits in the known synchronization word, providing the second compensated DC average to the offset tracking device.

FROM McANDREWS, HELD, & MALLOY

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Claims 19-27 (Cancelled).